AMENDMENTS TO THE CLAIMS

Listing of Claims:

1-3. (Cancelled)

4. (Currently amended) A transformed plant characterized in that it expresses ~~at least one hemoglobin or~~ at least one leghemoglobin and at least one [[H]]hemoglobin.

5. (Currently amended) The transformed plant according to claim 4, characterized in that the leghemoglobin and/~~or~~ hemoglobin is are independently derived from a plant selected from ~~plants from~~ the group consisting of *Lupinus luteus, Glycine max, Medicago sativa, Medicago trunculata, Phaseolus vulgaris, Vicia faba, Pisum sativum, Vigna unguiculata, Lotus japonicus, Psophocarpus tetragonolobus, Sesbania rostrata, Casuarina glauca,* ~~and~~ *Canvalaria lineate, Physcomitrella patens, Arabidopsis thaliana, Gossypium hirsutum, Oryza sativa, Brassica napus, Lycopersicon esculentum, Hordeum vulgare, Zea mays, Trema tomentosa, or Parasponia rigida.*

6. (Currently amended) The transformed plant according to claim 4, characterized in that the leghemoglobin is derived from *Lotus japonicus* and/~~or~~ the hemoglobin is derived from ~~Lotus japonicus and~~ *Arabidopsis thaliana.*

7. (Currently amended) The transformed plant according to claim 4, characterized in that it expresses the leghemoglobin and/~~or~~ the hemoglobin in a storage-organ-specific manner.

8. (Currently amended) The transformed plant according to claim 4, characterized in that it expresses the ~~at least one~~ leghemoglobin and/~~or~~ the hemoglobin in a tuber-specific and/or seed-specific manner.

9. (Currently amended) The transformed plant according to claim 4, characterized in that it comprises ~~at least one of the sequences of SEQ ID NOS: 3 and 5 coding for hemoglobin or~~ at least one nucleic acid molecule having a sequence ~~of~~ as set forth in SEQ ID NO: 1 coding for a leghemoglobin and at least one ~~of the~~ nucleic acid molecule having a sequence[[s]] ~~of~~ as set forth in SEQ ID NO[[S]]: ~~3 and~~ 5 coding for hemoglobin.

10. (Currently amended) The transformed plant according to claim 4, characterized in that it comprises a nucleic acid molecule having a nucleotide sequence[[s]] with ~~approximately 70%~~ at least 90% identity with ~~the~~ a sequence[[s]] ~~of~~ as set forth in SEQ ID NO[[S]]: 1~~, 3 and/or 5~~ and

codes for a leghemoglobin and a nucleic acid molecule having a nucleotide sequence with at least 90% identity with a sequence as set forth in SEQ ID NO: 5 and codes for a hemoglobin.

11. (Previously presented) The transformed plant according to claim 4, characterized in that it produces starch and/or oil.

12. (Currently amended) The transformed plant according to claim 4, characterized in that it is a monocotyledonous crop plant~~, in particular of the species *Gramineae*~~.

13. (Currently amended) The transformed plant according to claim 4, characterized in that it is a dicotyledonous crop plant~~, in particular from the family, *Asteraceae, Brassicacea, Compositae, Cruciferae, Cucurbitaceae, Leguminosae, Rubiaceae, Solanaceae, Sterculiaceae, Theaceae or Umbelliferae*~~.

14. (Previously presented) The transformed plant according to claim 13, characterized in that it is potato, *Arabidopsis thaliana*, soybean or oilseed rape.

15-23. (Cancelled)

24. (Currently amended) A transformed plant comprising at least one ~~gene structure according to claim 22~~ first vector comprising a nucleotide sequence with at least 90% identity with a sequence as set forth in SEQ ID NO: 1 coding for a leghemoglobin, and at least one second vector comprising a nucleotide sequence with at least 90% identity with a sequence as set forth in SEQ ID NO: 5 coding for a hemoglobin.

25-44. (Cancelled)

45. (Currently amended) A method for the production of starch and/or oil~~, characterized in~~ comprising growing the transformed ~~that a~~ plant according to claim 4 ~~is used~~ and recovering the starch and/or oil ~~is recovered~~ from the transformed plant.

46. (New) The monocotyledonous crop plant according to claim 12, characterized in that it is a *Gramineae* species.

47. (New) The dicotyledonous crop plant according to claim 13, characterized in that it is a *Asteraceae, Brassicacea, Compositae, Cruciferae, Cucurbitaceae, Leguminosae, Rubiaceae, Solanaceae, Sterculiaceae, Theaceae* or *Umbelliferae* species.

48. (New) The dicotyledonous crop plant according to claim 13, characterized in that the plant is selected from the group consisting of *Borago officinalis* (borage), *Brassica campestris*, *Brassica napus, Brassica rapa* (mustard or oilseed rape), *Cannabis sativa* (hemp), *Carthamus tinctorius* (safflower), *Cocos nucifera* (coconut), *Crambe abyssinica* (crambe), *Cuphea* species, *Elaeis guinensis* (African oil palm), *Elaeis oleifera* (American oil palm), *Glycine max* (soybean), *Gossypium hirsutum* (American cotton), *Gossypium barbadense* (Egyptian cotton), *Gossypium herbaceum* (Asian cotton), *Helianthus annuus* (sunflower), *Linum usitatissimum* (linseed or flax), *Oenothera biennis* (evening primrose), *Olea europea* (olive), *Oryza sativa* (rice), *Ricinus communis* (castor-oil plant), *Sesamum indicum* (sesame), *Triticum* species (wheat), *Zea mays* (maize), walnut and almond.

49. (New) The transformed plant according to claim 24, characterized in that the first vector comprises a nucleotide sequence as set forth in SEQ ID NO: 1 and the second vector comprises a nucleotide sequence as set forth in SEQ ID NO: 5.